Owner's Guide

6300
DENTAL LIGHT

a-dec®

85.2602.00

Products List | Print | Table of Contents

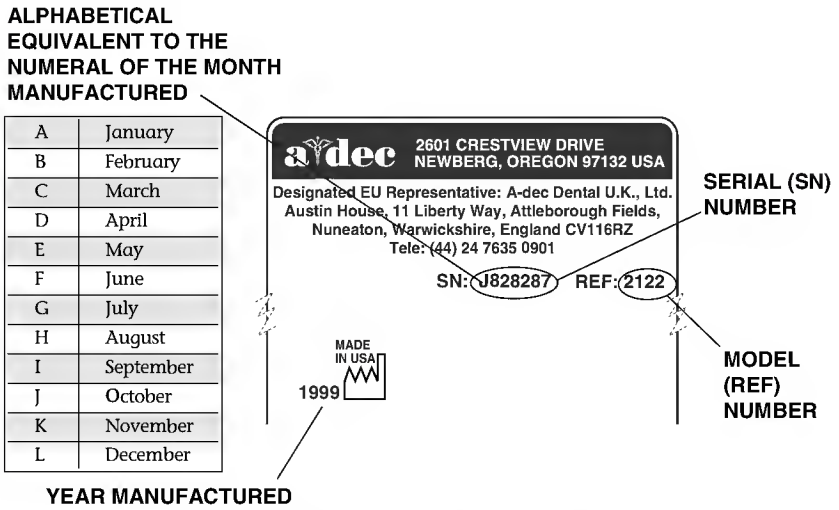
Warranty Information

Serial Number _____

Model Number _____

Date Purchased _____

Date of Service	Model/Description of Service	Technician's Initials



Serial Number Identification

6300 Dental Light Serial Number Location:

- Lights with Integrated Power Transformers: see Figure 3 on page 4
- Cascade and Radius lights: at the base of the light post

For service information contact your local authorized A-dec dealer.

Check with local codes and A.D.A. (Americans with Disabilities Act) requirements for installation of this product.

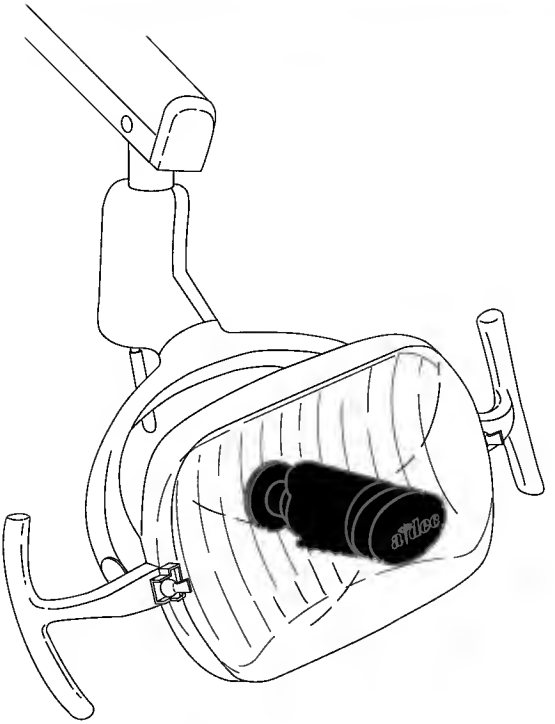
A-dec warrants its products and A-dec/W&H Synea handpieces against defects in material or workmanship for one year from time of delivery. All other handpiece instrumentation has a warranty period of six months. A-dec's sole obligation under the warranty is to provide parts for the repair, or at its option, to provide the replacement product (excluding labor). The buyer shall have no other remedy. (All special, incidental, and coincidental damages are excluded.) Written notice of breach of warranty must be given to A-dec within the warranty period. The warranty does not cover damage resulting from improper installation or maintenance, accident or misuse.The warranty does not cover damage resulting from the use of cleaning, disinfecting or sterilization chemicals and processes. The warranty also does not cover light bulbs. Failure to follow instructions provided in A-dec's Operation and Maintenance Instructions (Owner's Guide) may void the warranty.

NO OTHER WARRANTIES AS TO
MERCHANTABILITY OR OTHERWISE ARE MADE.

a-dec®

All product names used in this document are trademarks or registered trademarks of their respective holders.

Printed in U.S.A. • Copyright © 1999 • All Rights Reserved



6300 Dental Light

CONTENTS

Serial number location, service information, and warranty information are located on the inside front cover and front page.

Controls 2
On/Off and Intensity Switches 2
Lights with a Separate Power Supply 3
Lights with an
Integrated Power Transformer 3
Focusing the Light 5
Replacing the Bulb 6
Care Instructions 8
Cleaning the Shield 8
Cleaning the Reflector 9
Light Head Adjustment 10
Maintenance 12
Adjustments and Specifications 12
Identification of Symbols 13
Classification of Equipment (EN 60601-1) ... 13

Controls

On/Off and Intensity Switches

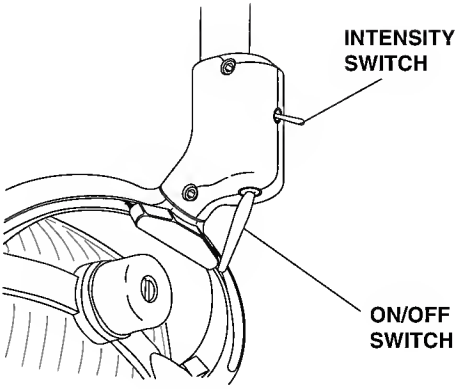


Figure 1. On/Off and Intensity Switches

The ***On/Off Switch*** is equipped with a large handle so you can easily turn the light on and off. To turn the light ON, face the light reflector and move the handle to the right. For **Cascade®** or **Radius® Master lights**, the On/Off control is on the touch pad *(refer to A-dec Publication 85.2627.00)*.

The ***Intensity Switch*** is a three-position switch that allows you to select low, medium, or high light intensity.

Products List | Print | Table of Contents

Lights with a Separate Power Supply

Cascade and Radius lights use circuit breakers which are located in the floor box power supply *(see Figure 2 below)*.

For access to the circuit breakers, remove the cover from the floor box *(if necessary, refer to* ***Floor Boxes,*** *A-dec Publication No. 85.2611.00)*.

If a circuit breaker has tripped, reset it by pushing the button. Put the floor box cover back in place. Verify the operation of the light by turning it on and operating it at each intensity switch setting.

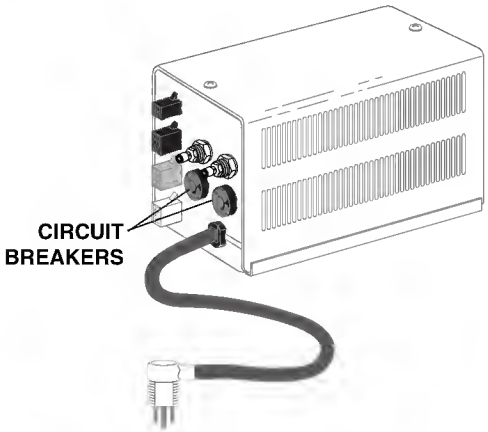


Figure 2. Circuit Breakers

Lights with an Integrated Power Transformer

If you have a Preference, Track, Ceiling, Post, or Wall-mount 6300 light, a circuit breaker will interrupt the flow of electricity under infrequent abnormal conditions. If the circuit breaker should trip, reset it by pushing the button. For circuit breaker locations, refer to Figure 3 on page 4.

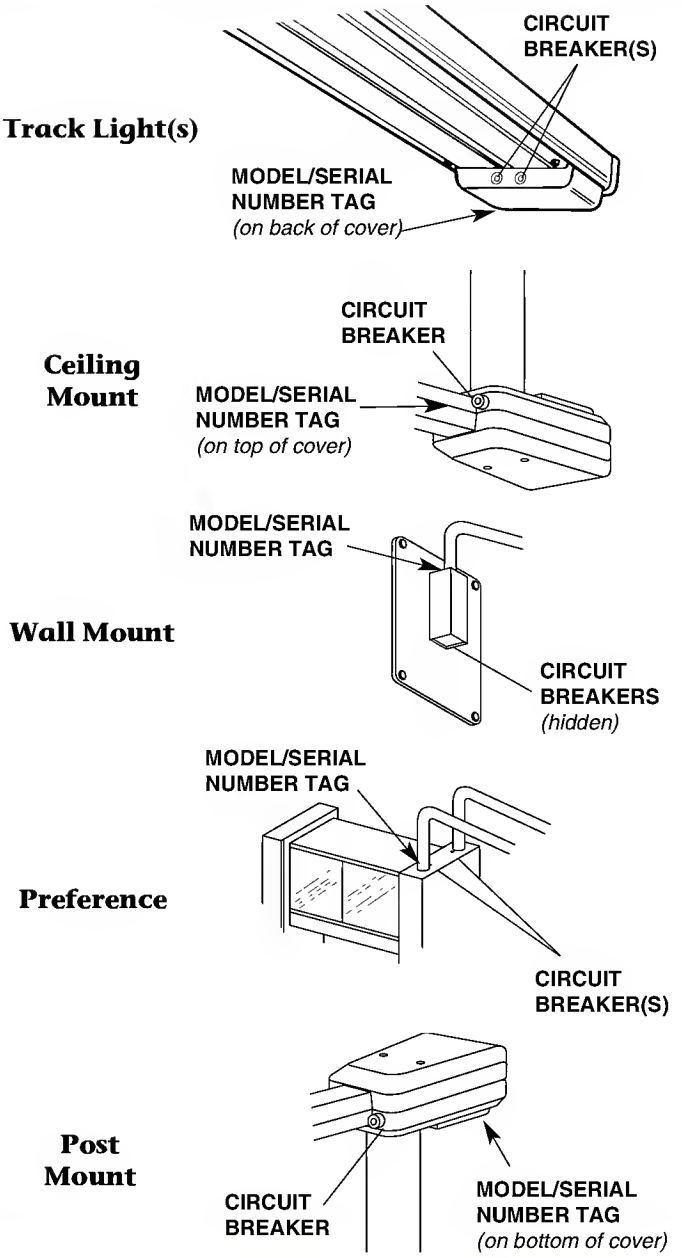


Figure 3. Circuit Breaker and Model/Serial Number Locations

Focusing the Light

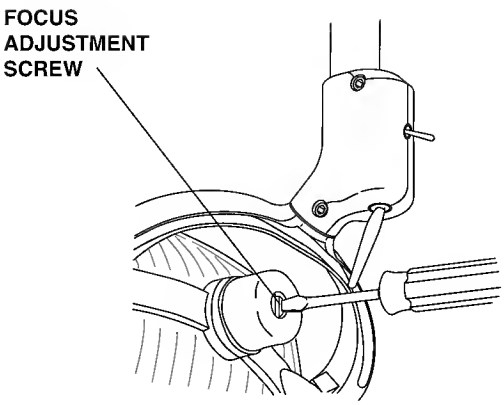


Figure 4. Focus Adjustment

The light is adjusted at the factory for proper illumination at 27 inches (69 cm) from the oral cavity. However, you can quickly and easily adjust the light focus (between 18 and 31 inches [between 46 cm and 79 cm]) to best suit your needs.

To adjust the focus, place a white towel over the chair headrest. Using the towel to represent the oral cavity, position the light head at the distance you would normally use it when working in the oral cavity (select a distance representative of most of your work). Turn the light ON. Now use a large screwdriver or coin to turn the focus adjusting screw *(see Figure 4)* until the light within the borders of the light pattern is most uniform.

Replacing the Bulb

WARNING

To avoid burning your fingers, allow the bulb to cool before touching it.

Touching the bulb with your bare fingers could cause the bulb envelope to fracture. Finger oils can also affect light performance and severely limit bulb life. Install the bulb using the wrapper to protect the bulb. If you should inadvertently touch the bulb, gently clean it with cotton dampened with isopropyl or ethyl alcohol.

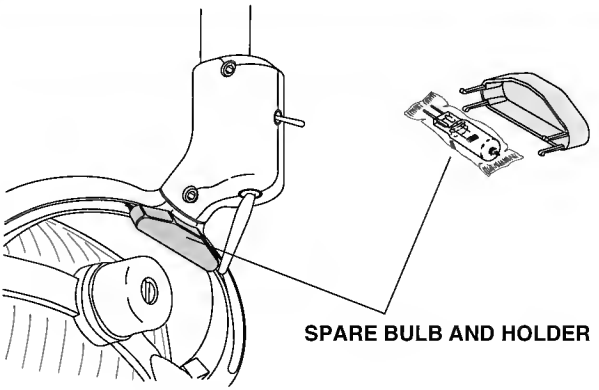


Figure 5. Spare Bulb and Holder

Pull the spare bulb plastic holder from the light head *(see Figure 5)*. Remove the bulb from the holder, but do not remove the outer wrapper. Install the bulb using the wrapper to protect the bulb from finger oils *(see Figure 6 on page 7)*.

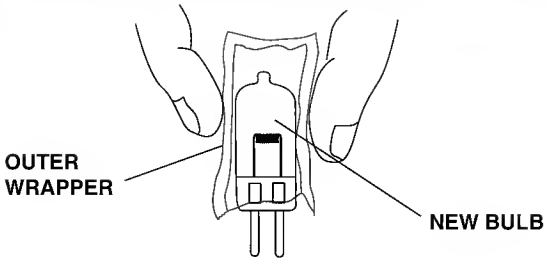


Figure 6. Bulb Insertion

A card inside the spare bulb holder gives you the part number for ordering a replacement bulb and holder. Replace the new bulb and holder on the light head.

To replace the bulb (see the WARNING on page 6), turn off the light and allow the light to cool. If you must replace the bulb immediately (to continue working on a patient, for instance), turn off the light. Release the toggles on the light shield and set the shield aside *(see Figure 7 on page 8)*. Using a gauze pad or cloth to protect your fingers, carefully pull the old bulb from its socket and discard it. Holding the new bulb in its outer wrapper with the pins away from you, carefully insert it in the socket. The bulb base is fragile and can break under excess pressure. Remove and discard the outer wrapper, then reinstall the light shield and secure with the toggles.

Verify the operation of the light by turning it on and operating it at each intensity switch setting.

WARNING

Never operate the light with the light shield removed. The clear shield contains UV blocking additives. The light shield is also your protection in the unlikely event that the bulb shatters.

Care Instructions

Cleaning the Shield

WARNING

To avoid personal injury, be sure that the light has cooled before cleaning it.

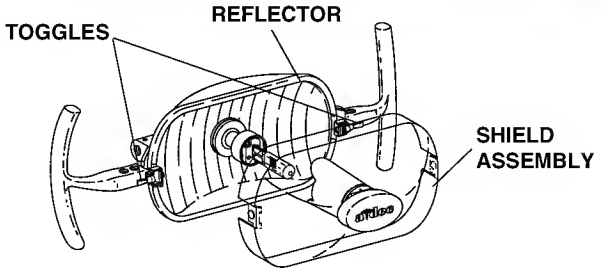


Figure 7. Removing the Shield Assembly

Caution

DO NOT rub heavily, DO NOT clean the shield when it is hot, and DO NOT soak the shield assembly in cleaning solution. Doing so may damage the shield assembly components. Clean the light shield only as instructed.

Allow the light to cool, then wipe the outside surface of the shield with a 100% cotton gauze pad or a soft, dry, lint-free cloth. If necessary, soak the pad or cloth with water or with a diluted solution of mild dishwashing liquid before cleaning. Make certain no residue remains on the shield.

To clean the inside of the shield, release the toggles on either side of the light *(see Figure 7)*, remove the shield and use the same procedure used to clean the outside. Put the shield back on the light head and secure with the toggles before operating the light.

Products List | Print | Table of Contents

Cleaning the Reflector

Caution

DO NOT use abrasives or chlorine (such as household bleach) on the surface of the reflector. These can damage or discolor the reflector surface, impairing the effectiveness of the light.

DO NOT rub heavily, DO NOT clean the reflector when it is hot, and DO NOT soak the reflector in cleaning solution.

When dust or spots on the surface of the reflector impair the efficiency of the light, allow the light to cool, then release the toggles on either side of the shield *(see Figure 7 on page 8)* and remove the shield from the light.

Using a 100% cotton gauze pad or a soft, lint-free cloth, gently wipe the surface of the reflector clean.

If necessary, soak the pad or cloth with water or with a diluted solution of mild dishwashing liquid before cleaning. Make certain no residue remains on the reflector. Put the shield back on the light head and secure with the toggles before operating the light.

For further recommended asepsis instructions, refer to ***Equipment Asepsis Owner's Guide*** *A-dec Publication No. 85.0696.00.*

Light Head Adjustments

Note

For light focusing information, refer to page 5.

If the light head is difficult to position, moves too easily, or tends to slip out of position, the light head needs adjustment.

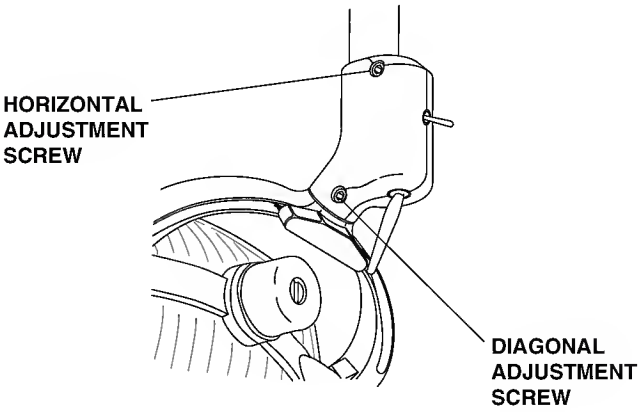


Figure 8. Diagonal and Horizontal Adjustments

To adjust or eliminate the third axis of rotation ***(diagonal)****:* using a 5/32-inch hex key, turn the adjustment screw at the bottom of the switch housing. If the light head moves too easily, or tends to drift out of position, increase the tension by turning the screw clockwise. If the light head is difficult to move, loosen the tension by turning the screw counterclockwise. To eliminate all movement in the diagonal axis, tighten the adjustment screw until it stops.

To adjust left/right rotation ***(horizontal):*** using a 5/32-inch hex key, turn the adjustment screw at the top of the switch housing *(see Figure 8 on page 10)*. If the light head moves too easily, or tends to drift out of position, increase the tension by turning the screw clockwise. If the light is difficult to move, loosen the tension by turning the screw counterclockwise.

To adjust up/down rotation ***(vertical):*** using a 5/64-inch hex key to loosen the setscrew shown in Figure 9. Remove the end cap. To make the adjustment, use a large flat-blade screwdriver to turn the adjustment screw under the end cap. If the light head moves too easily, or tends to drift out of position, increase the tension by turning the screw clockwise. If the light head is difficult to move, loosen the tension by turning the screw counterclockwise. When the desired tension is achieved, reinstall the end cap and retighten the setscrew.

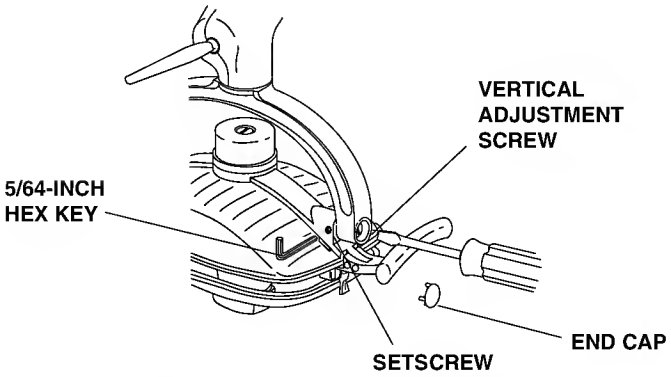


Figure 9. Vertical Adjustment

Maintenance

Replacing the Bulb .....*page 6*
Care Instructions .....*page 8*
Equipment Asepsis
Owner's Guide *85.0696.00*
Parts
Maintenance Parts
Owner's Guide *85.2634.00*

Adjustments and Specifications

Resetting the Circuit Breaker
Lights with a Separate Power Supply.....*page 3*
Lights with an Integrated
Power Transformer .....*page 3*
Focus the Light.....*page 5*
Light Head Adjustments.....*page 10*

Operating voltage:
100V, 120V, or 240V (Post-, Ceiling-, Wall-, Preference and Track-Mount Lights)
Operating wattage: 96 watts
Bulb: Quartz Xenon Halogen, single-end prongs, extended life
Lamp rating: 24V/150W
Color temperature: 5000° Kelvin
Light pattern: 3.3" x 6.3" at 27.6" (85 mm x 160 mm at 700 mm)
Nominal light intensity:
Low: 16,000 lux (1486 fc)
Medium: 20,000 lux (1858 fc)
High: 24,000 lux (2230 fc)
Heat output: 325 BTU/hour

Specifications are subject to change without notice.

Identification of Symbols

Recognized by Underwriters Laboratories Inc. ® with respect to electric shock, fire and mechanical hazards only in accordance with UL 2601-1. Recognized with respect to electric shock, fire and mechanical hazards only in accordance with CAN/CSA C22.2, No. 601.1.

UL listed to US (UL 544) and Canadian (CAN/CSA C22.2, No. 125) safety standards.

Classified by Underwriters Laboratories Inc. ® with respect to electric shock, fire and mechanical hazards only in accordance with UL 2601-1. Classified with respect to electric shock, fire, mechanical and other specified hazards only in accordance with CAN/CSA C22.2, No. 601.1.

Conforms to European Directives
(refer to Declaration Statement)

Protective earth (ground).

Functional earth (ground).

Attention, consult accompanying documents.

TYPE B APPLIED PART.

CLASS II EQUIPMENT.

Classification of Equipment (EN 60601-1)

Type of shock protection:
CLASS I EQUIPMENT
(Dental Chairs, Dental Lights, & Power Supplies)
CLASS II EQUIPMENT
(Chair, Wall, & Cart Mounted Delivery Systems)

Degree of shock protection:
TYPE B APPLIED PART (All products)

Degree of protection against water ingress:
ORDINARY EQUIPMENT (All products)

Mode of operation
CONTINUOUS OPERATION
(All models except Dental Chairs)

Mode of operation
CONTINUOUS OPERATION
WITH INTERMITTENT LOADING (Dental Chairs)

Notes

a-dec®

2601 Crestview Drive
Newberg, Oregon 97132 U.S.A.
Telephone 1-800-547-1883
(503) 538-7478
Fax (503) 538-0276

a-dec
international, inc.

Designated Representative's Address:
A-dec Dental U.K., Ltd.
Austin House
11 Liberty Way
Attleborough Fields Industrial Estate,
Nuneaton, Warwickshire,
England CV11 6RZ
Telephone: 0800-ADECUK (233285) Within UK
00 44 24 7635 0901 Outside UK
Fax: 00 44 24 7634 5106

Designated Representative's Address:
A-dec Australia
41-43 Bowden Street
Alexandria, N.S.W. 2015, Australia
Telephone: (61) 1.800.225010 within Australia
00612-9699-4600 outside Australia
Fax: 00612-9699-4700

85.2602.00
1999-10 Rev D
(01813)

Made with 50% waste paper

Printed in USA.
Copyright © 1999,
All Rights Reserved.